Installation Instructions

Pre-Installation notes, precautions and Instructions

Windstar front passenger power seats must be retrofitted with manual slide tracks prior to installation of the Braun Companion Seat. Several Ford parts must be ordered to complete the conversion (see list below).

Ford Parts List		
Item	**Description**	**Ford Part No.**
1	Passenger Side Slide Track	61705
2	Driver Side Slide Track	61704
3	Passenger Side Seat Guard	62186
4	Driver Side Seat Guard	62187

The Ford part numbers are base numbers. Use your vehicle's VIN and the base numbers to order the correct parts from Ford.

Note: If the vehicle is equipped with a center console between the driver and passenger seat it must be removed to allow room for the Companion Seat base. The console and all features contained within the console will be removed and not utilized at this location (example - VCR, entertainment system or storage compartment).

1 Disable Vehicle SRS (Supplemental Restraint System)

⚠WARNING

To avoid accidental deployment and possible personal injury, the backup power supply must be depleted before repairing or replacing any front or side air bag supplemental restraint system (SRS) components and before servicing, replacing, adjusting or striking components near the front or side air bag sensors, such as doors, instrument panel, console door latches, strikers, seats and hood latched.

Note: The passenger seat side air bag sensors are located at the base of the B-pillar.

Before beginning installation procedures, review the following precautions and recommendations from Ford Motor Company regarding a front passenger seat equipped with a side air bag.

The Ford Windstar can have a passenger seat equipped with or without a side air bag deployment unit. When installing the Companion Seat in a vehicle with a passenger seat side air bag, follow the procedures in the Ford Windstar Service Manual to disable the SRS. An abbreviated list of these Ford procedures is listed below. Reference the Ford Windstar Service Manual for a detailed listing of precautions and procedures for the deactivation and reactivation of the SRS.

When the OEM seat assembly is removed from the OEM seat base, the following steps **must** be taken to assure the OEM SRS is fully restored and operational as designed, tested and manufactured.

⚠WARNING

Never probe connectors on the air bag module. Doing so can result in air bag deployment, which can result in personal injury.

⚠WARNING

Do not disconnect the wire connector at the side air bag module. This is a permanent connection. Doing so may result in accidental air bag deployment, which may result in person injury.

To deplete the backup power supply energy, disconnect the battery ground cable and wait at least one minute. Be sure to disconnect auxiliary batteries and power supplies (if equipped).

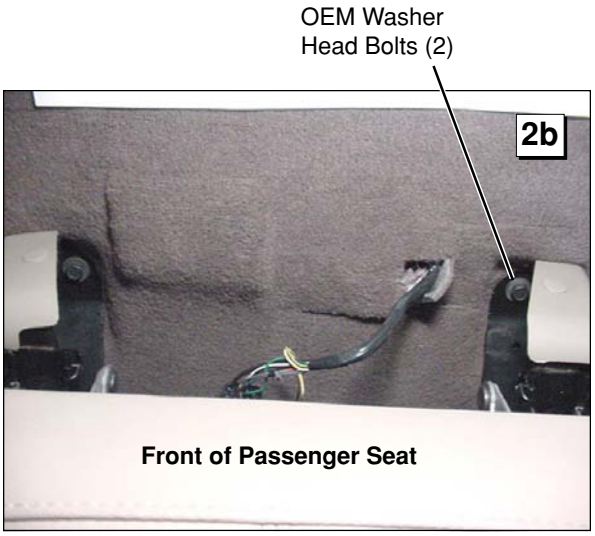
After the backup power supply has been depleted, continue with the installation of the Companion Seat.

2 Remove Passenger's Seat and Pedestal

Two floor mounted studs secure the rear of the passenger seat and pedestal. Remove the stud caps to access the washer head hex nuts (the caps snap off). Use a 18MM wrench to remove the washer head hex nuts securing the rear of the passenger seat. Keep the OEM nuts.

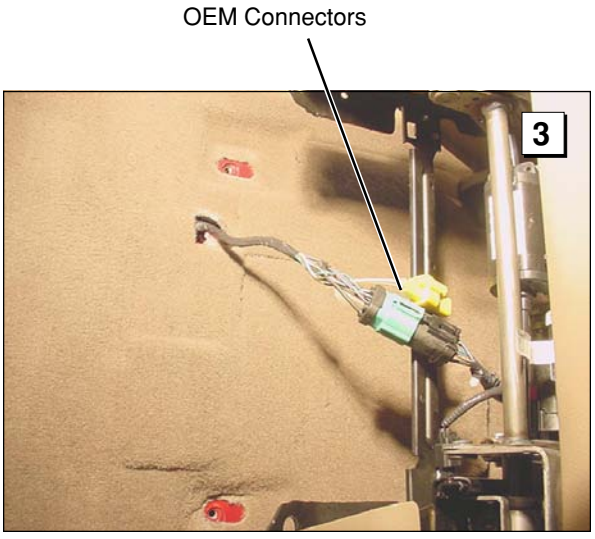
Two washer head bolts secure the front of the passenger seat and pedestal. Use a 13MM wrench to remove the washer head bolts securing the front of the passenger seat. Keep the OEM bolts.

Note: Do not remove passenger seat until OEM connectors have been disconnected.



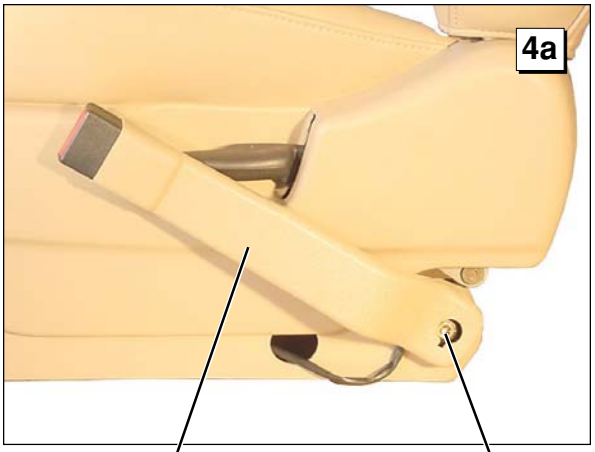
3 Disconnect OEM Connectors

Carefully tip the passenger seat and pedestal toward the rear of the vehicle to expose the OEM connectors. Disconnect the yellow and the green connectors. Remove the seat / pedestal assembly from the vehicle.

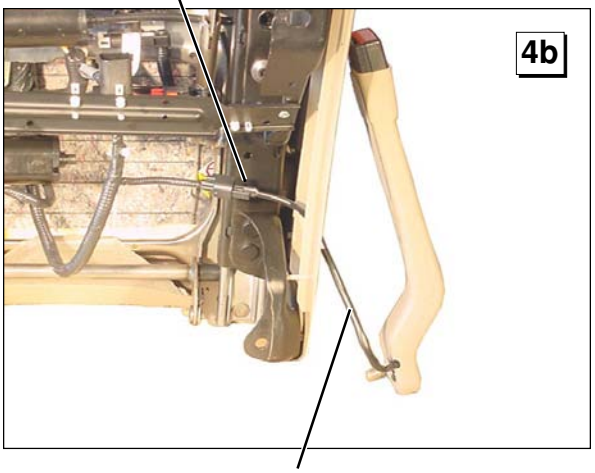


4 **Remove OEM Seat Belt Receptacle**

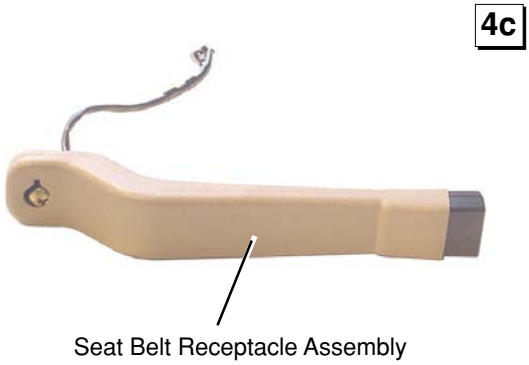
Remove the OEM seat belt receptacle from the seat pedestal. Carefully remove the plastic plug covering the belt receptacle mounting bolt (turn the plug counterclockwise to remove plug). Keep the plug. Remove the belt receptacle mounting bolt using a T50 Torx wrench.



Carefully disconnect the seat belt indicator harness connecting the receptacle assembly to the seat assembly.

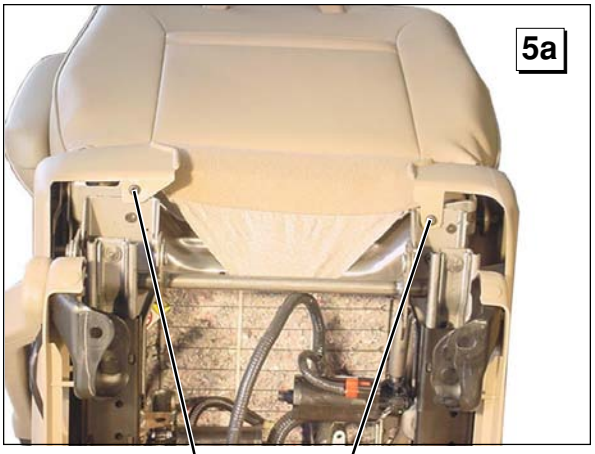


Carefully remove the seat belt receptacle assembly from the seat assembly. Keep seat belt receptacle.



5 **Remove Power Seat Plastic Trim Guards**

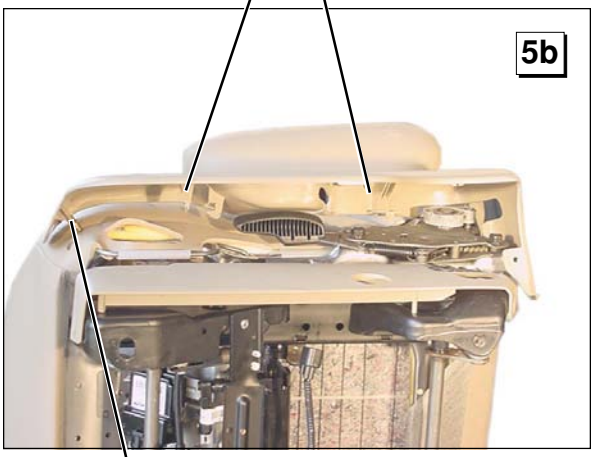
Remove the two plastic guards from the sides of the seat. Use a T30 Torx wench to remove the screws securing each panel to the bottom rear of the seat.



Torx Seat Guard Mounting Screws

Snap (clip) type fasteners

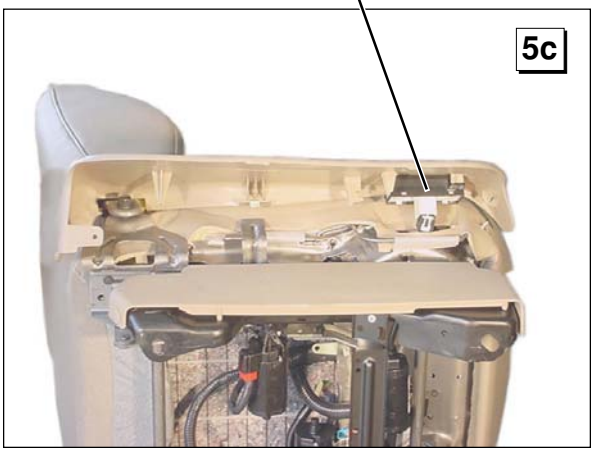
Snap (clip) type fasteners secure the guards to the side and front of the seat. Threaded insert type fasteners secure the guards to the front corners of the seat. **Carefully** remove the plastic guards (see Photos 5b and 5c).



Threaded Insert Fastener

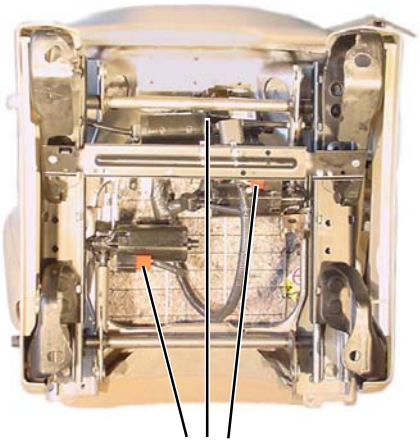
Power Seat Control Switch

Note: Disconnect power seat control wiring harness from the switch assembly on the passenger side guard of the seat.



6 Disconnect Power Seat Motors

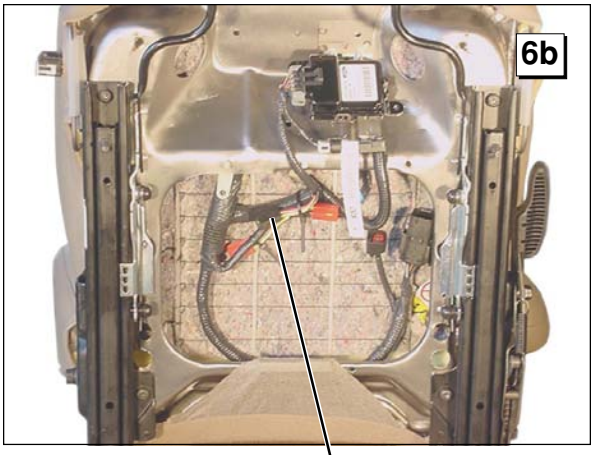
Disconnect the power harness to each of the three power seat motors mounted on the seat pedestal. The harnesses have red connector plugs.



6a

Disconnect three Motor Harness

Cable tie the motor harness together and to the bottom of the seat as shown.

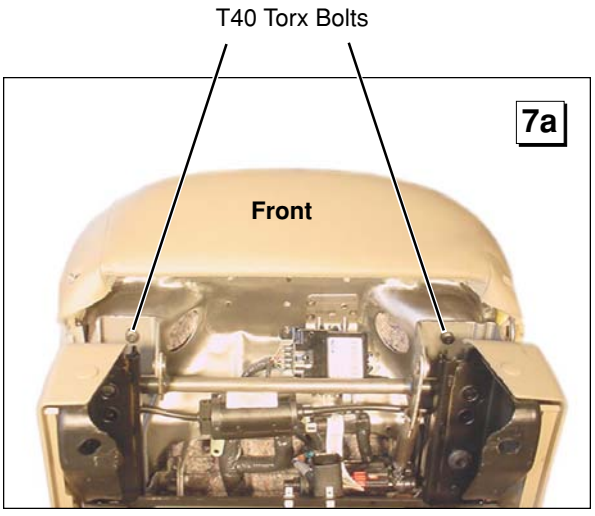


6b

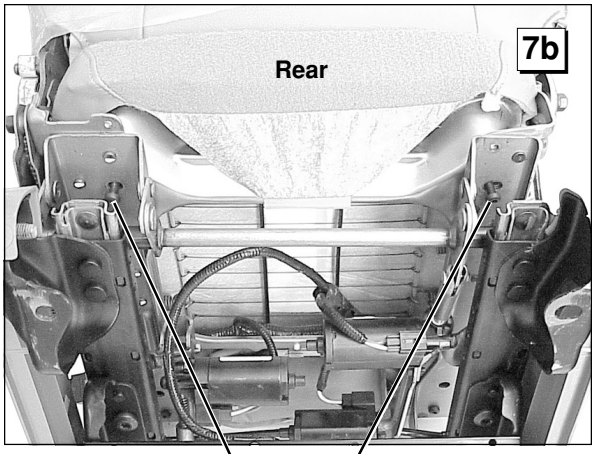
Power Seat Motor Harness
Cable Tied to Seat Bottom

7 Remove OEM Seat Pedestal

Remove the two front pedestal mounting bolts using a T40 Torx wrench. Keep the hardware.

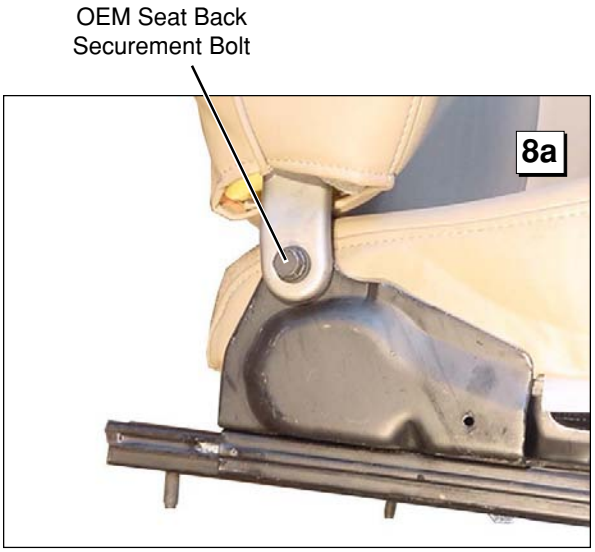


Remove the two rear pedestal mounting bolts using a T40 Torx wrench. Keep the hardware.

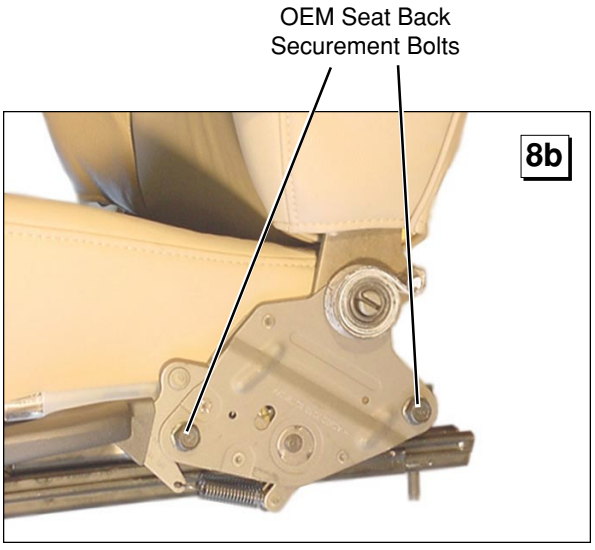


8 **Remove the Bolts securing Power Base to the Seat Back**

The power seat base is bolted to the seat back. Remove OEM seat back mounting bolt using a 15MM wrench. The passenger side of the seat assembly is shown in Photo 8a. Keep the hardware.

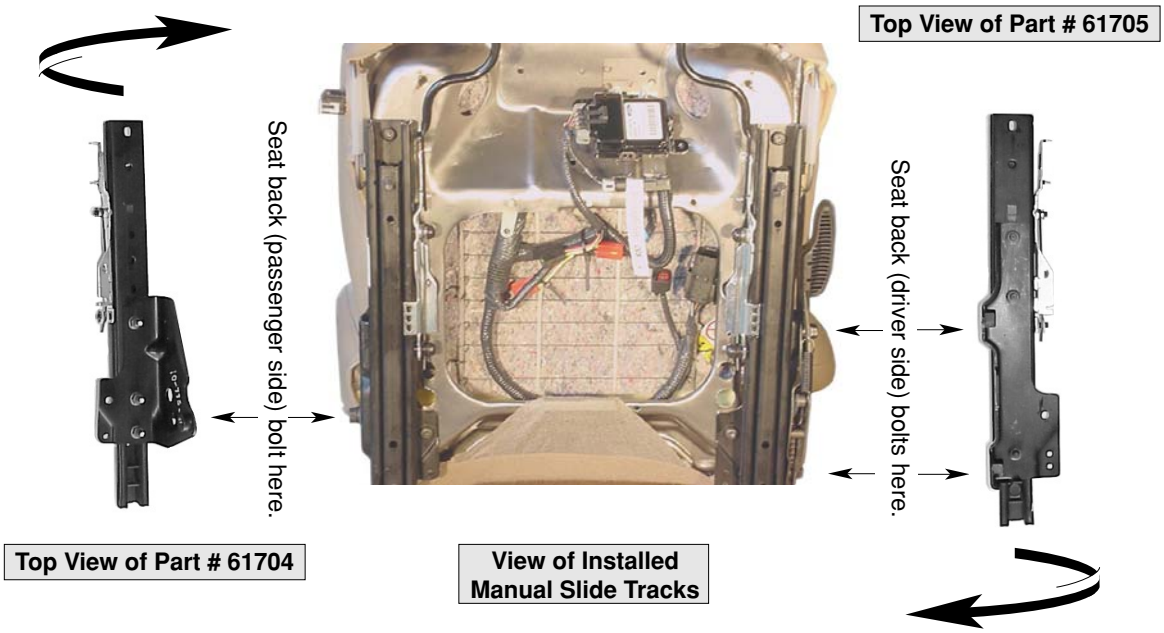


Remove OEM seat back mounting bolts using a 15MM wrench. The drivers side of the seat assembly is shown in Photo 8b. Keep all hardware.



Installation Instructions

9 Mount the Manual Slide Tracks


Top View of Part # 61705
Seat back (passenger side) bolt here.
Seat back (driver side) bolts here.
Top View of Part # 61704
View of Installed Manual Slide Tracks

Mount the manual slide tracks to the seat bottom using a T40 wrench to secure the OEM bolts that previously secured the power slide assembly to the seat bottom.

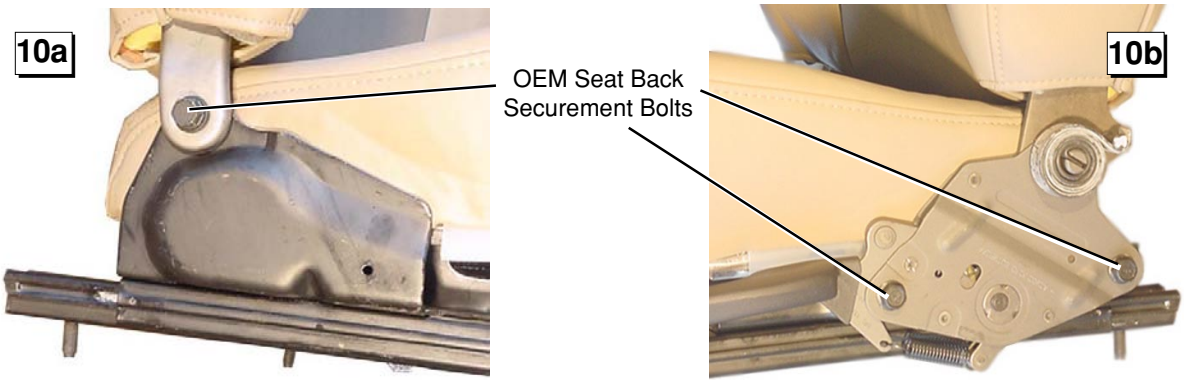
Note: To access the mounting holes, slide the lower track of the manual slide assemblies.

Apply **Loctite**® or other thread locking compound to the mounting bolts. **Tighten securely. Torque Specifications:** 17 foot pounds.

Note: Be sure to set the slide position on the manual slide tracks before mounting the seat assembly to the Companion Seat base. The "front-to-back" position of the seat is not adjustable after the seat assembly has been mounted.

10 Secure Manual Slide Seat assembly to Seat Back

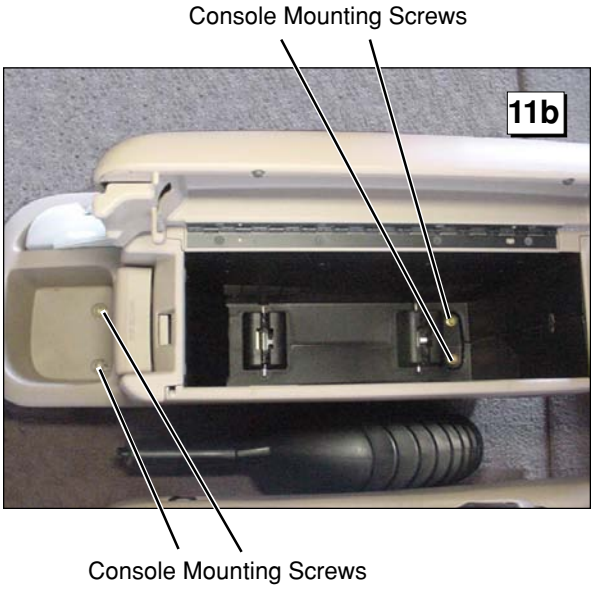
Secure the seat back to the manual slide tracks using a 15MM wrench on the OEM bolts retained from Step 8. There is one bolt on the passenger side and two bolts securing the drivers side of the seat back. Apply **Loctite**® or other thread locking compound to the mounting bolts. **Tighten securely. Torque Specifications:** 30 foot pounds (passenger), 33 foot pounds (driver).



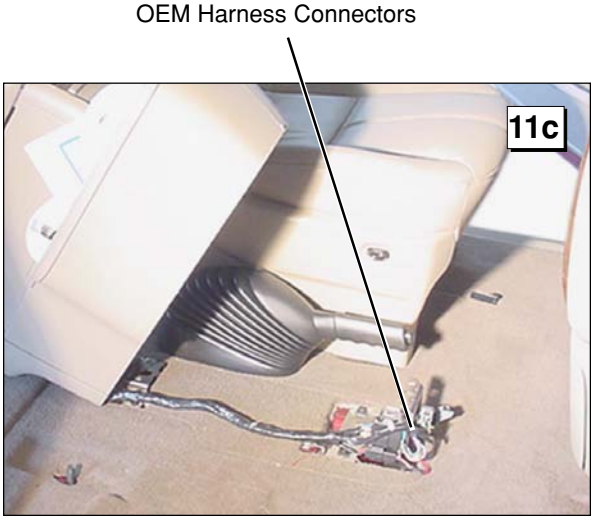
11 **Remove Center Console (if equipped)**

If the vehicle is equipped with a center console it must be removed to allow space for the Companion Seat. If the vehicle does not have a center console, omit Step 11 and continue installation with Step 12.

Open the top of the center console. There are two screws inside the box that must be removed. If the console does not appear as shown, you must remove the obstruction (refer to Ford Manual). Pull the handle at the front of the console and pull the VCR out of the console. After removing all obstructions from inside the console, use a 7MM wrench to remove the four screws securing the console.

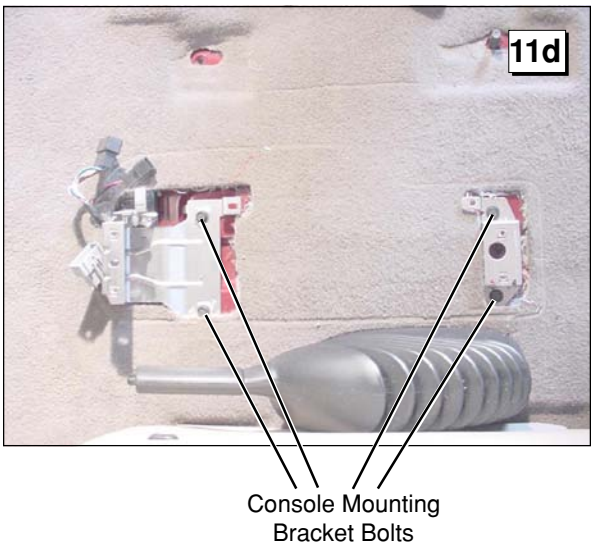


Carefully tilt the console toward the rear of the vehicle as shown. Disconnect the three OEM harness connectors. Remove the center console.



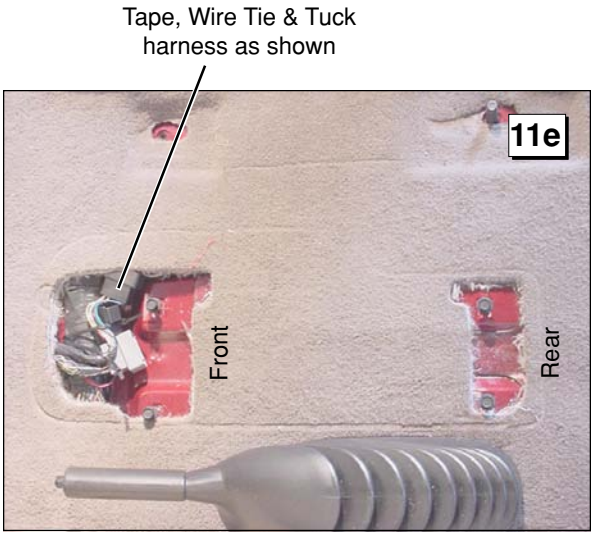
Remove Center Console (if equipped)
(Continued)

Use an 11MM wrench to remove the four bolts securing the center console mounting brackets. Remove the brackets.



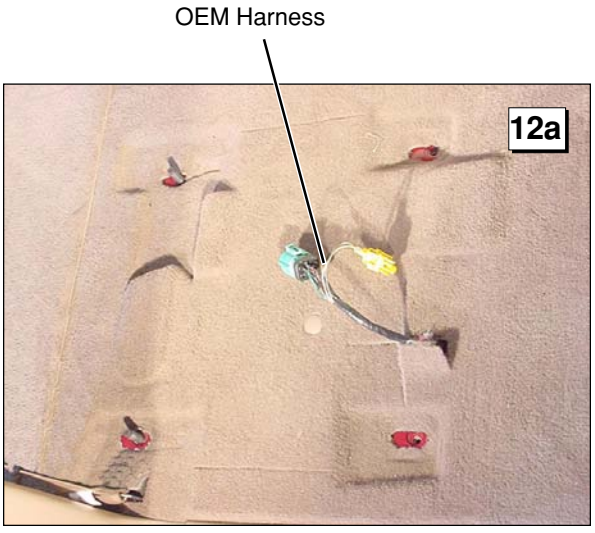
Use electrical tape to cover the ends of the OEM connectors. Wire tie the connectors together and tuck them into the carpet void as shown. Replace the front bracket's mounting bolts and tighten securely to plug the mounting holes. The connectors, bolts and the front carpet void will be covered by the Companion Seat base once it has been installed.

Note: The rear carpet void will be fitted with a cover plate after the power cable has been routed.

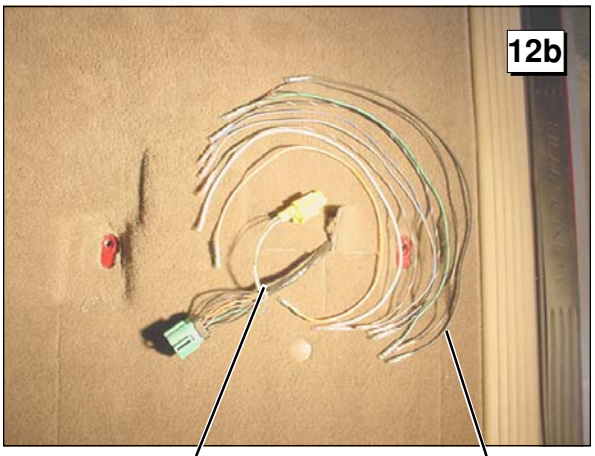


12 Extend OEM Harnesses

The OEM seat power harness (green plug) and seat mounted side air bag harness (yellow plug) must be extended. **Carefully** cut the OEM wiring harness two inches from the green and yellow plugs. Strip 3/8" of insulation from all wires.



The extension wires are shown here. The wires correspond with the OEM harness wires in color and gauge. Match the wires of the OEM harness and connector plugs to the extension wires (color and gauge). Insert the OEM wires into the corresponding butt connectors of the extension harness. Crimp the butt connectors securely. Place the extended air bag and power harness together in the plastic loom. See Photo 13a.



OEM Harness

Extension Wires

Extended OEM Harness

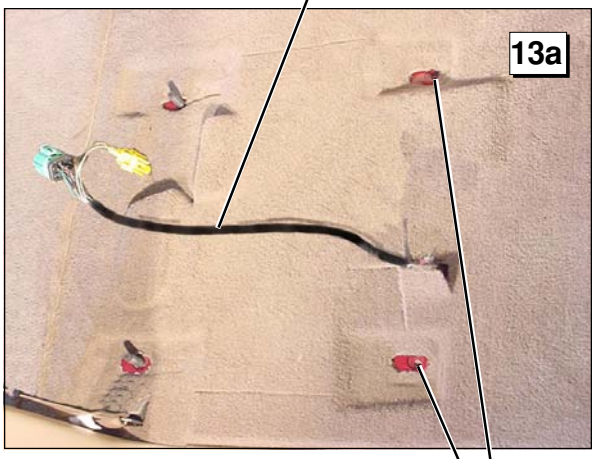
13 Prepare Seat Mounting Location

Route the extended harness toward the rear of the vehicle as shown.

⚠WARNING

Check for obstructions such as gas lines, wires, exhaust, ect. before drilling or cutting. Failure to do so may result in serious bodily injury and/or property damage.

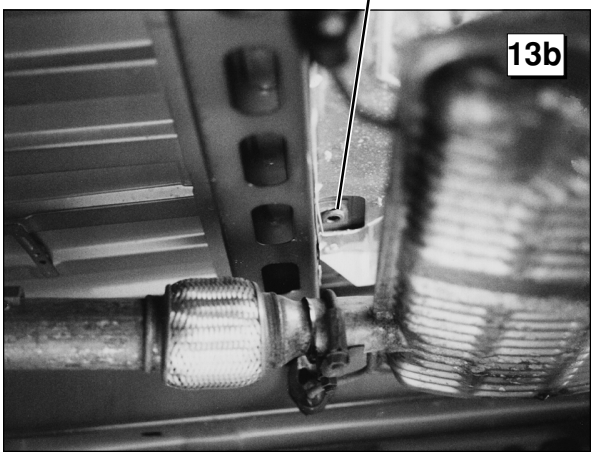
Carefully drill (ream) out the two front OEM seat mounting holes to 1/2" diameter.



OEM Seat Mounting Holes

Below Floor Bushings

Note: Threaded bushings are spot welded to the underside of the floor (previously for seat mounting bolt securement). Be sure The reaming procedure produces a 1/2" diameter hole though the vehicle floor and these bushings.

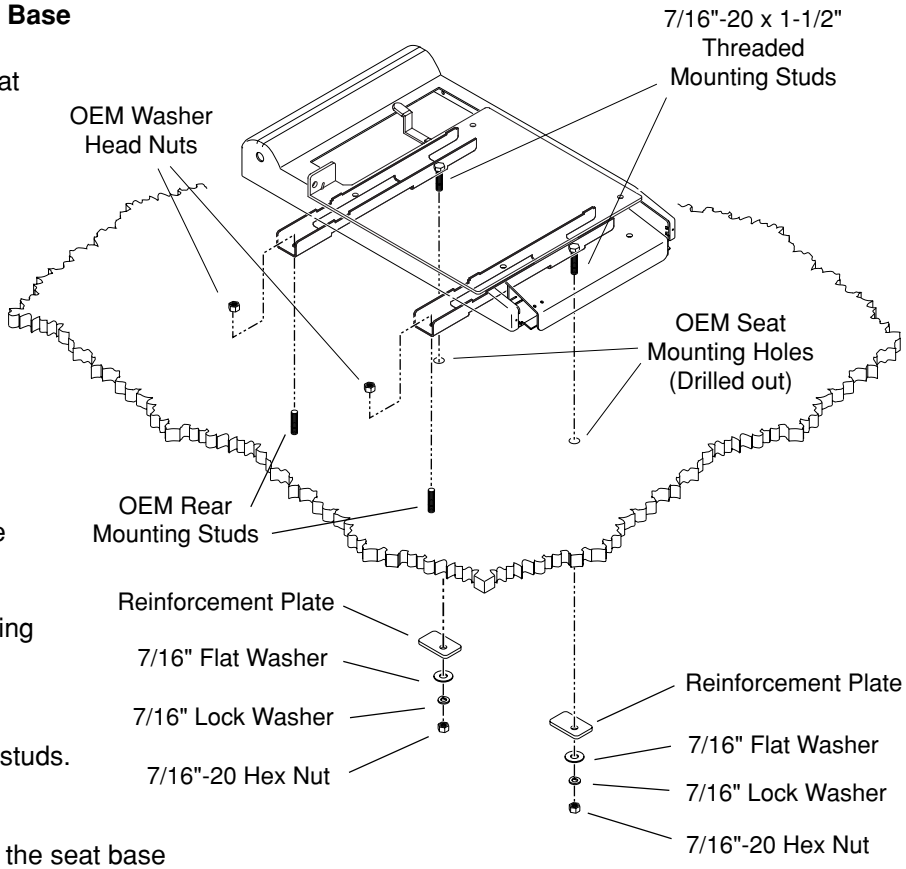


14 Mount Companion Seat Base

Carefully position the seat base.

Two floor mounting cross members are located on the bottom of the Companion Seat base. One 1/2" diameter mounting hole is provided at the rear of each cross member.

Carefully position the seat base by inserting the two threaded studs in the two OEM front seat mounting holes and aligning the two 1/2" diameter Companion Seat base mounting holes with the OEM seat rear mounting studs.

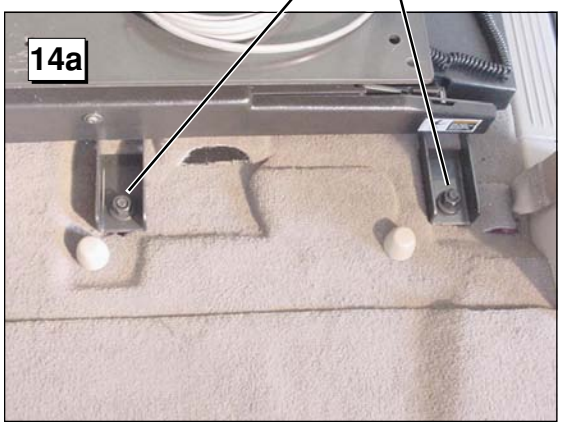


Note: Route the wiring harness out the corner of the seat base (between the driver's seat and Companion Seat base) such that the harness is **not damaged** when positioning the seat base.

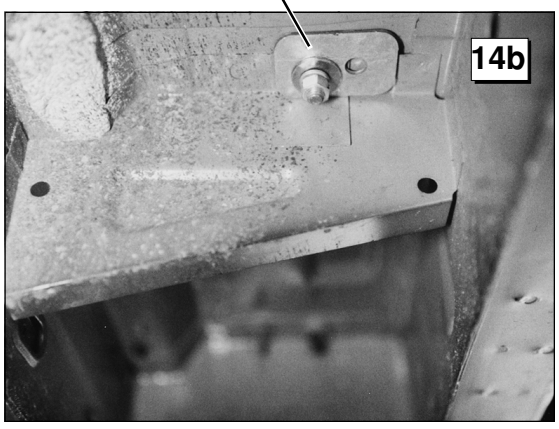
Above Floor Mounting Hardware: Secure the two OEM rear mounting studs using the two OEM washer head nuts. Apply Loctite® or other thread locking compound to the mounting studs. Use an 18MM wrench to **tighten the bolts securely. Torque Specifications:** 41 foot pounds.

Below Floor Mounting Hardware: Place one reinforcement plate, one 7/16" flat washer, one 7/16" lock washer and one 7/16"-20 hex nut on each of the Companion Seat front mounting studs. **Tighten Securely. Torque Specifications:** 50-55 foot pounds.

Above Floor Mounting Hardware



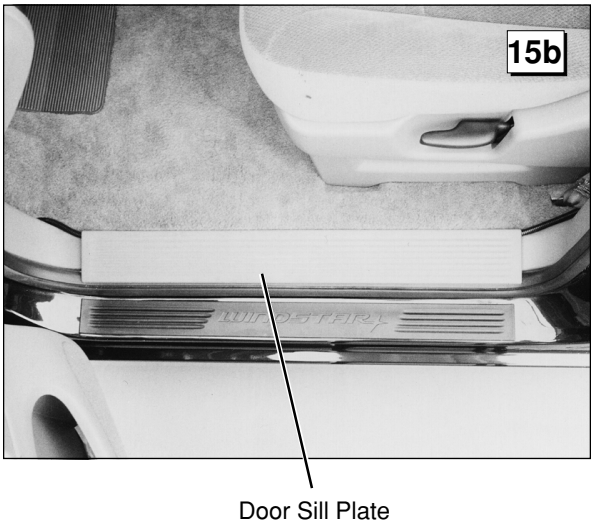
Below Floor Mounting Hardware



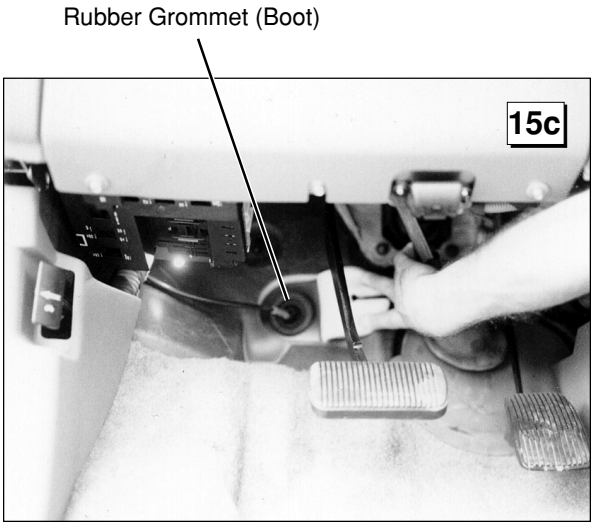
15 **Route, Secure and Connect Power Cable**

Route the Companion Seat power harness as shown. Route the harness through one of the voids in the OEM carpet to the carpet seam located between the driver and rear passenger seat. The harness is routed around the rear of the drivers seat as shown. Secure the power cable using the plastic cable clips and self tapping screws. Reposition the carpet seam to conceal the power cable.

Remove the driver's side plastic sill plate. The sill plate is secured with snap (clip) fasteners. Route the power cable under the sill plate toward the fire wall. Reposition and snap in the sill plate.



Locate the rubber grommet (boot) located in the vehicle floorboard that the transmission shifter cable routes though to the engine compartment. Temporarily pull the insulated foam mat up from the floor to access the grommet. **Carefully** cut a hole (slit) in the rubber boot for power harness access.



Route, Secure and Connect Power Cable (Continued)

Open the vehicle hood. Temporarily remove the midsection of the fresh air intake duct to access the floor board. A hose clamp secures the passenger's side end of the duct and a over-center type clamp secures the driver's side end.

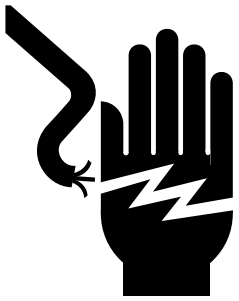
⚠WARNING

Route cable clear of exhaust system, other hot areas and moving parts. Failure to so may result in serious bodily injury and/or property damage.

Carefully route the harness through the floor board access hole (see Photo 15e) into the engine compartment.

Carefully connect the fuse end of the wiring harness to the vehicle's **Positive (+)** battery post. Squeeze (depress) and lift the plastic battery post cover to access the battery post.

⚠WARNING



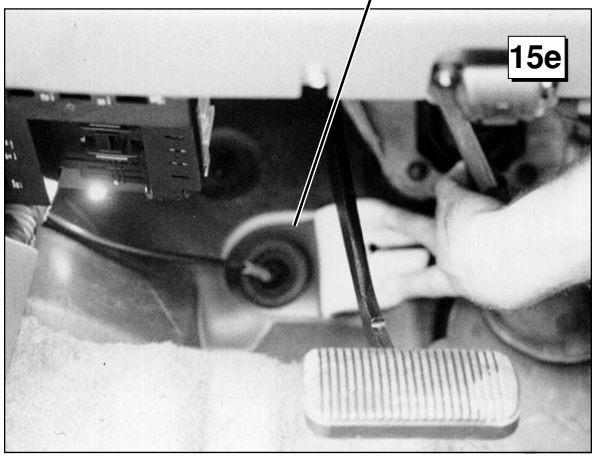
Risk of electrical shock! Use extra care when making electrical connections.

The Companion Seat power cable also has a ground terminal. Unscrew the OEM chassis ground and secure the eye terminal of the power cable to the OEM chassis ground.

Tighten harness connections securely. Reposition the plastic battery post cover.

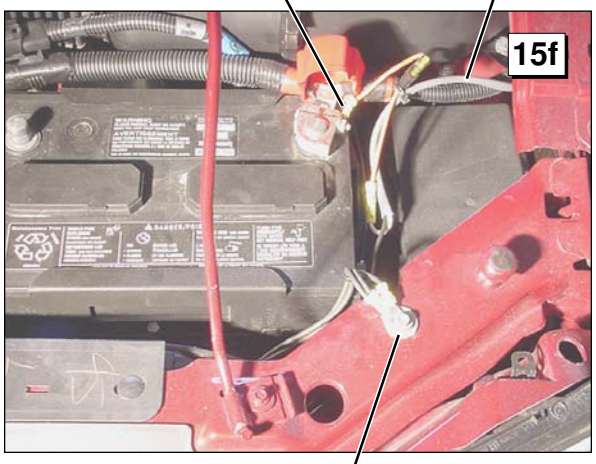
Midsection of Intake Duct

Rubber Grommet (Boot)



Positive (+) Connection

Power Cable



OEM Ground Stud

Test the operation of the Companion Seat base to ensure the power cable has been connected properly. Cycle the Companion Seat base through the extend and retract operations using the hand held pendant. See operating instructions on pages 6 and 7.

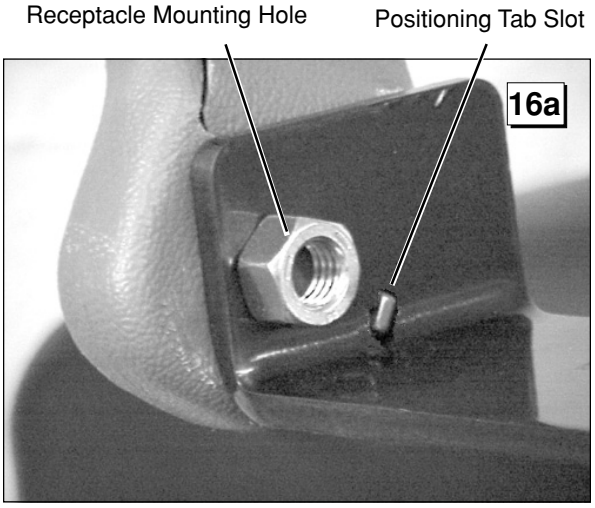
After you have successfully cycle tested the Companion Seat base, return to the OEM rubber boot that the power cable is routed through. See Photo 15e. Caulk or silicon the area around the harness to seal the opening used to access the engine compartment of the vehicle.

Reposition and secure the fresh air intake duct in the engine compartment.

Install the center console mounting bracket cover. Use an 11MM wrench to secure the cover with the rear OEM mounting bracket bolts.

16 **Secure Seat Belt Receptacle to Companion Seat Base**

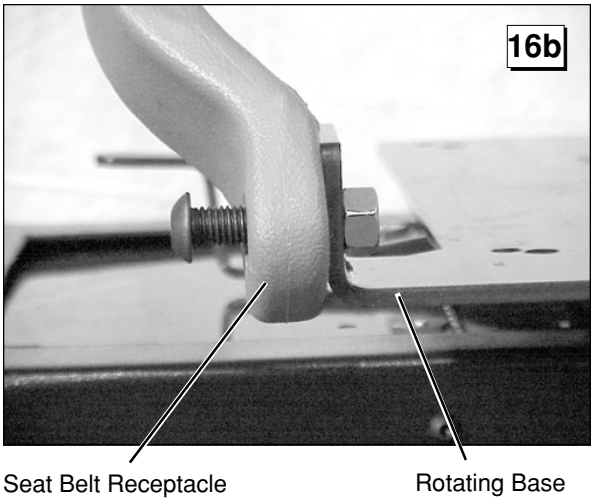
To secure the seat belt receptacle to the Companion Seat base, position the seat belt receptacle as shown. Be sure to insert the positioning tab on the seat belt receptacle assembly into the seat base positioning tab slot. See Photo 16a.



Secure Seat Belt Receptacle to Companion Seat Base (Continued)

Insert the 7/16" - UNF x 1-1/4" bolt into the receptacle and the Companion Seat base receptacle mounting hole. Secure the bolt with a 7/16" flat washer, a 7/16" lock washer and a 7/16" hex nut. Apply **loctite®** or other thread-locking compound to the mounting bolt. **Tighten securely. Torque Specifications:** 50-55 foot pounds.

Carefully reinsert the OEM plastic plug to conceal the receptacle mounting bolt. See Photo 4a on page 14.



17 Trim Manual Slide Plastic Seat Guards

The driver's side plastic seat guard must be trimmed to allow clearance for the OEM seat belt receptacle assembly.

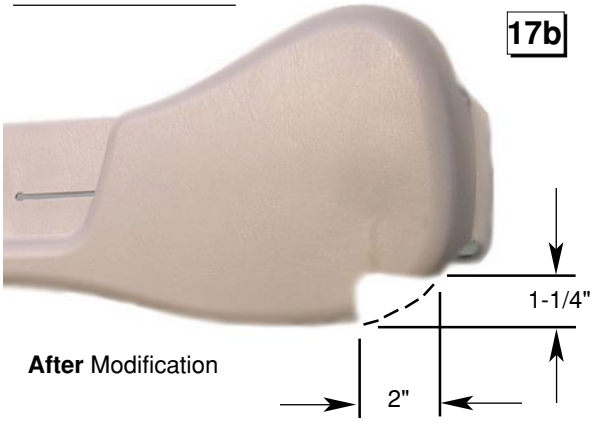
Driver's Side Guard

Before Modification

Trim the seat guard to the dimensions shown. Remove the dashed portion of the plastic seat guard.

Note: The passenger side plastic seat guard does not require modification.

Driver's Side Guard

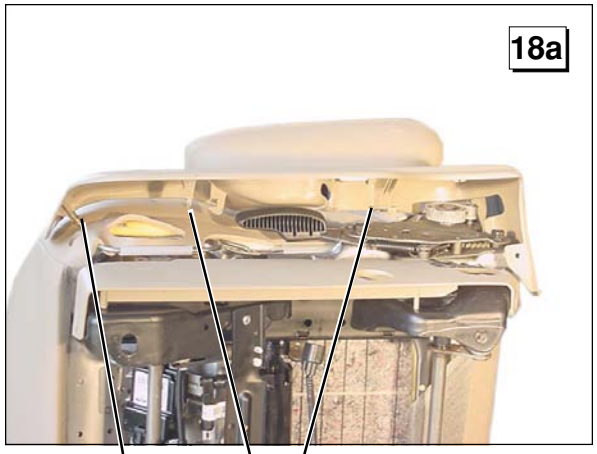


After Modification

18 Mount Plastic Seat Guards to Seat

Reposition the plastic seat guards. Threaded insert type fasteners secure the guards at the front corner of the seat, (position these first and work toward the back of the seat). There are two snap (clip) type fasteners securing the guard along the side of the seat, secure them.

Note: Only the manual slide seat guards should be used with the Companion Seat.

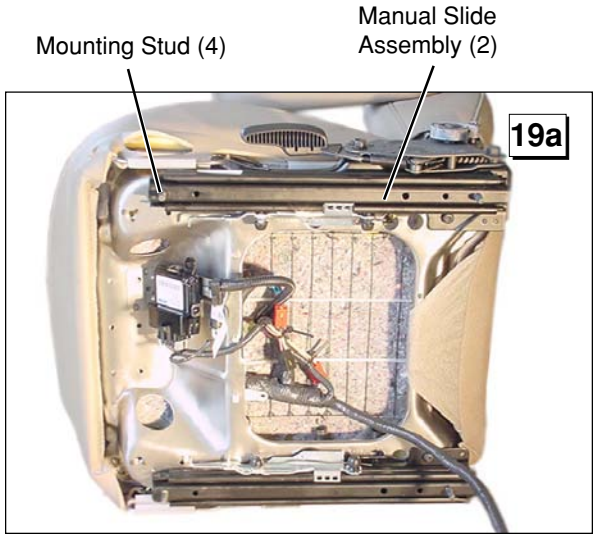


At this point the seat guard rear mounting holes should align with the mounting holes on the seat bottom. Use a T30 Torx wench to install the OEM screws. As shown in Photo 18b.

19 Prepare Seat for Installation

The manual slides have mounting studs at each end. Using the slide adjustment lever on each slide assembly or the slide adjustment bar, adjust the stud position to be straight across from the studs on the opposite slide assembly. Also adjust the stud position “front-to-back” to determine the location of your seat after mounting it to the Companion Seat base. If equipped with a slide adjustment bar, remove it before mounting (squeeze the legs of the bar together to remove).

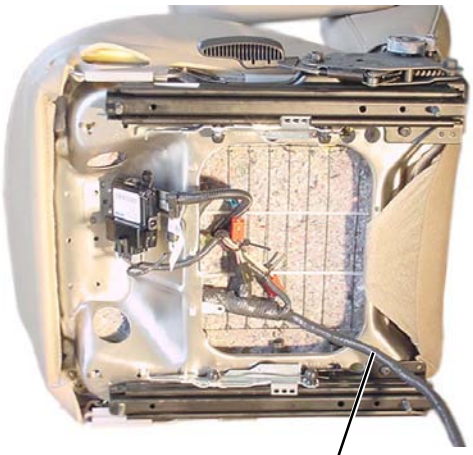
Note: After mounting the seat, the “front-to-back” position (slide) of the seat will not be adjustable.



Prepare Seat for Installation (Continued)

Be sure to run the OEM harness toward the rear of the seat. The harness will be reconnected to the vehicle at the back of the seat after mounting. By routing the harness toward the back of the seat it will also reduce the chance of damage during the securement of the seat assembly to the Companion Seat base.

19b



OEM Seat Harness

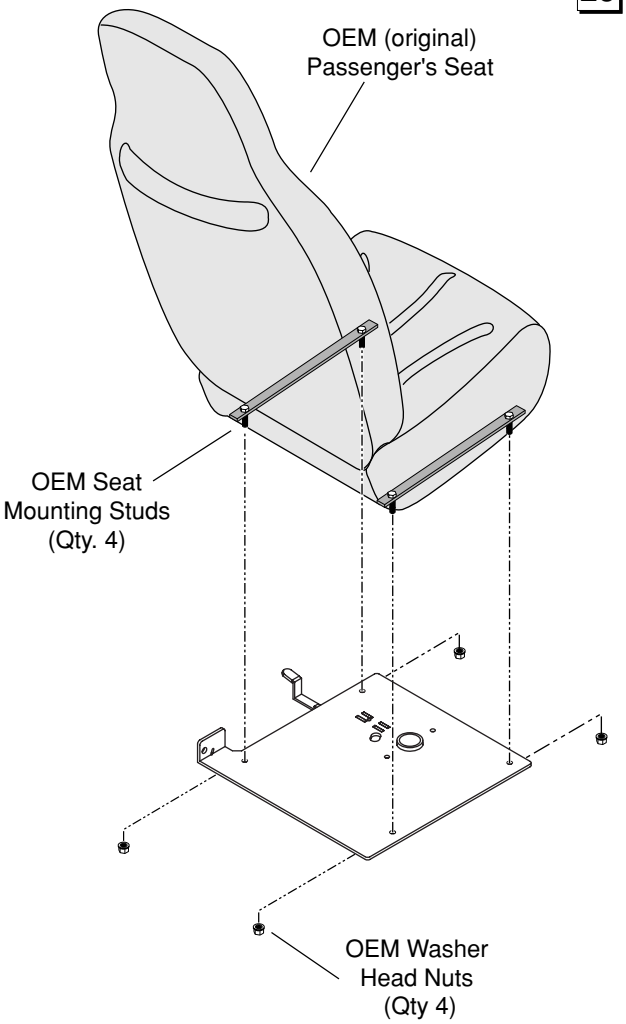
20 **Mount Seat to Companion Seat Base**

Rotate the seat base to the locked forward-facing position (the base retracted into vehicle and rotated to the forward facing position). Be sure the harness is clear (routed toward the rear of the vehicle) and position the seat onto the Companion Seat base.

Note: If the four OEM seat mounting studs do not line up with the Companion Seat base mounting holes, adjust slides as detailed in Step 19.

Insert the four OEM mounting studs into the Companion Seat mounting holes. Apply **loctite®** or other thread locking compound to the OEM seat mounting bolts. Use a 13MM wrench to **tighten** the four OEM washer head lock nuts. **Torque Specifications:** 17 foot pounds.

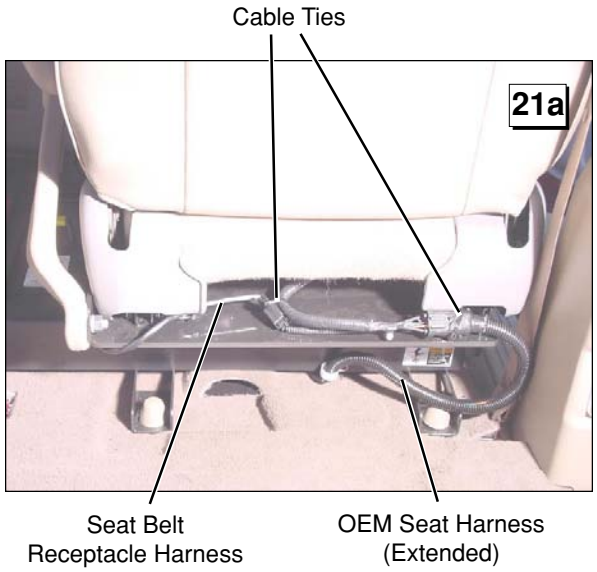
20



21 Reconnect and Secure OEM Harnesses

Connect the seat belt receptacle harness plug to the mating plug on the OEM seat harness as shown. Connect the OEM seat harness (yellow and green plugs) to the mating OEM plugs from the floor mounted OEM harness (extended harness).

Secure the seat harness to the seat bottom as shown using cable ties. Be sure the harnesses are secured loosely enough to eliminate component strain.

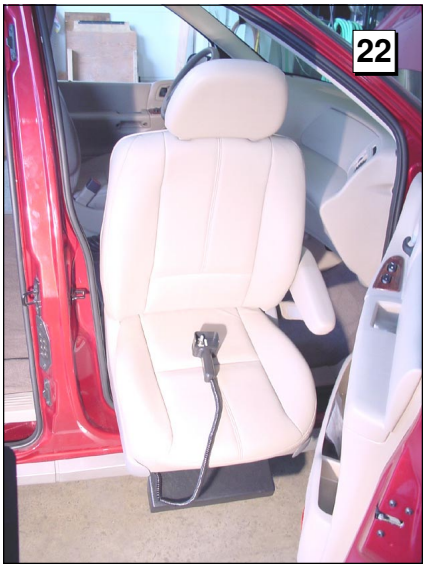


The extension harness must be secured to the Companion Seat as shown. Cycle the Companion Seat through the seat rotation and the stow/deploy cycles to determine the proper mounting length for the harness. The cable should not be strained during any part of the operation of the Companion Seat. Use a plastic clip for securement. Drill a 13/64" mounting hole in the Companion Seat plastic shroud for the clip. Use the pop rivet with a backing washer to secure the clip and harness to the shroud.

22 Test Seat Operation

Carefully operate the Companion Seat through all cycles following the operating instructions contained in this manual and posted on Warnings and Seat Operating Instructions decal 22616.

Keep all OEM hardware for possible use in the future.



23 **Post Decals**

⚠WARNING

Affix decals as specified. Failure to do so may result in serious bodily injury and/or property damage.

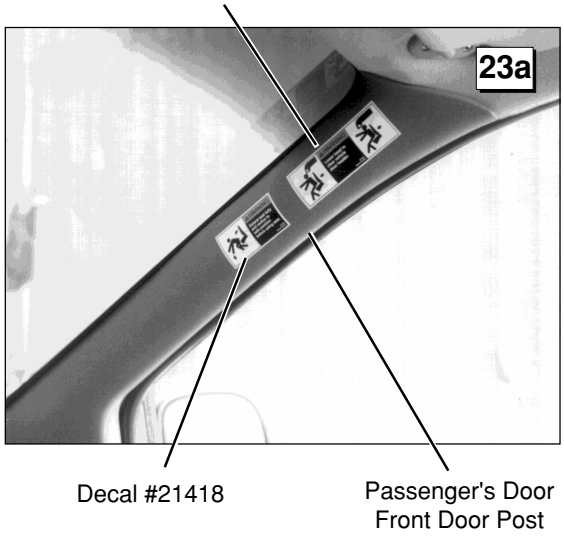
Post (affix) the safety instructions decals supplied with the Companion Seat at the locations specified here.

The decals **must** be visible to the Companion Seat occupant. **Important!** Prepare the decal posting surfaces as detailed.

Decal Application Procedure (Surface Preparation): Clean decal posting surfaces with isopropyl alcohol before decal application. Use a clean cloth or paper towels. **Do not** use oily shop rags. Wipe surface free of residue with dry portion of cleaning cloth.

Post Extend and Recline Warning Decal 21418 and Head Clearance Warning Decal 21419 as shown. Post decals on front door post (plastic molding) at edge of windshield.

Post Warnings and Seat Operating Instructions Decal 22616 on the vehicle dash as shown.



24 **Companion Seat Manual:**

Provide this manual to the consumer. **The manual must be stored in the Companion Seat-equipped vehicle at all times.**

⚠WARNING

Companion Seat owner's manual must be stored in seat-equipped vehicle at all times. Failure to do so may result in serious bodily injury and/or property damage.